Mississippi Perinatal Quality Collaborative

Charlene Collier MD, MPH, MHS, FACOG

Director

MSPQC BACKGROUND

- Launched November of 2014
- 3 Divisions
  - Maternal
  - Neonatal
  - Family & Community
- 2016 joined Alliance for Innovation on Maternal Health (AIM)
- 2018 CDC funding

Our Team

C. Collier MD, MPH

Director/
OB Lead

Monica Stinson, MS

Program
Manager

Jasmine Williams MPH,LPN

Project
Manager

Constance Bourne, MPH

Data Analyst

Janice Scaggs, DNP, CNM

OB Lead

Vaginal Birth

Kara Driver MD, MPH

Neonatal
Lead

Kim Sheffield, NP

Neonatal
Lead

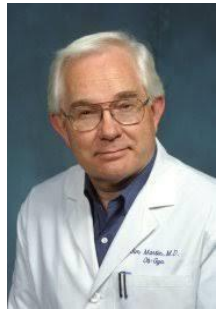
Mobolaji Famuyide, MD

Neonatal
Lead

Lakisha Crigler, MD, MBA

OB Lead

Hypertension



Jim Martin, MD

OB Lead

Hypertension

Stephanie Swiley, RNC-OB

Simulation Trainer

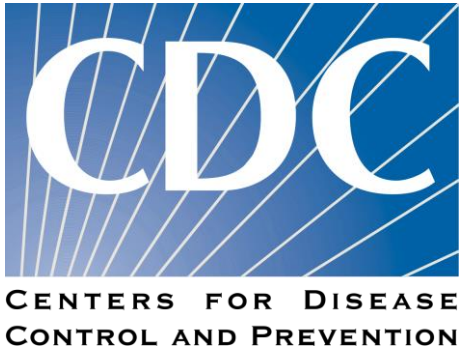
Partners


BlueCross BlueShield
of Mississippi
It's good to be Blue.


Safer
Childbirth
Cities
Jackson
Safer Childbirth
Experience


CHAMPS
COMMUNITIES AND HOSPITALS
ADVANCING MATERNITY PRACTICES


ALLIANCE FOR INNOVATION
ON MATERNAL HEALTH AIM


CDC
CENTERS FOR DISEASE
CONTROL AND PREVENTION


MSphi
Mississippi
Public Health
Institute

Racial Equity

- Evaluating all practices
- Data by race, geography, payer with focused goals to achieve equity
- 2021 Goal: Racial equity training for all birthing facilities in partnership with National Birth Equity Collaborative
- 3 Mississippi Hospitals/MSPQC partner with SACRED Birth Study to evaluate measures of Obstetric Racism

NBEC NATIONAL BIRTH EQUITY COLLABORATIVE

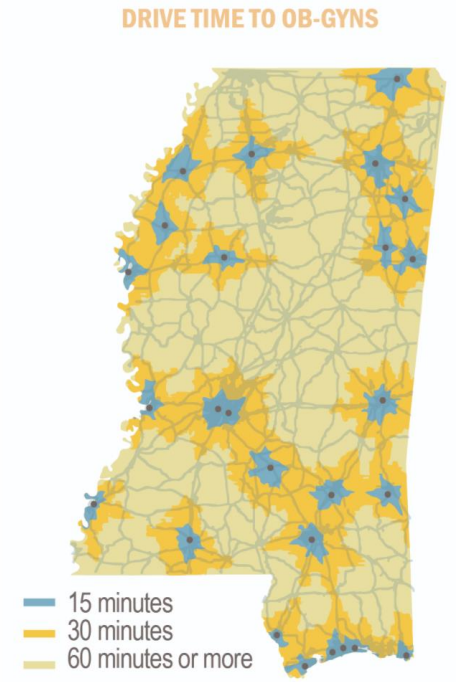
SACRED Birth During COVID19

The SACRED Birth Study is designed for, by, and with Black mothers and Black birthing people to share information about their patient experiences in hospital settings during labor, birth, and postpartum in six key areas:

Safety, ***A***utonomy, **C**ommunication, **R**acism, **E**mpathy, and **D**ignity.

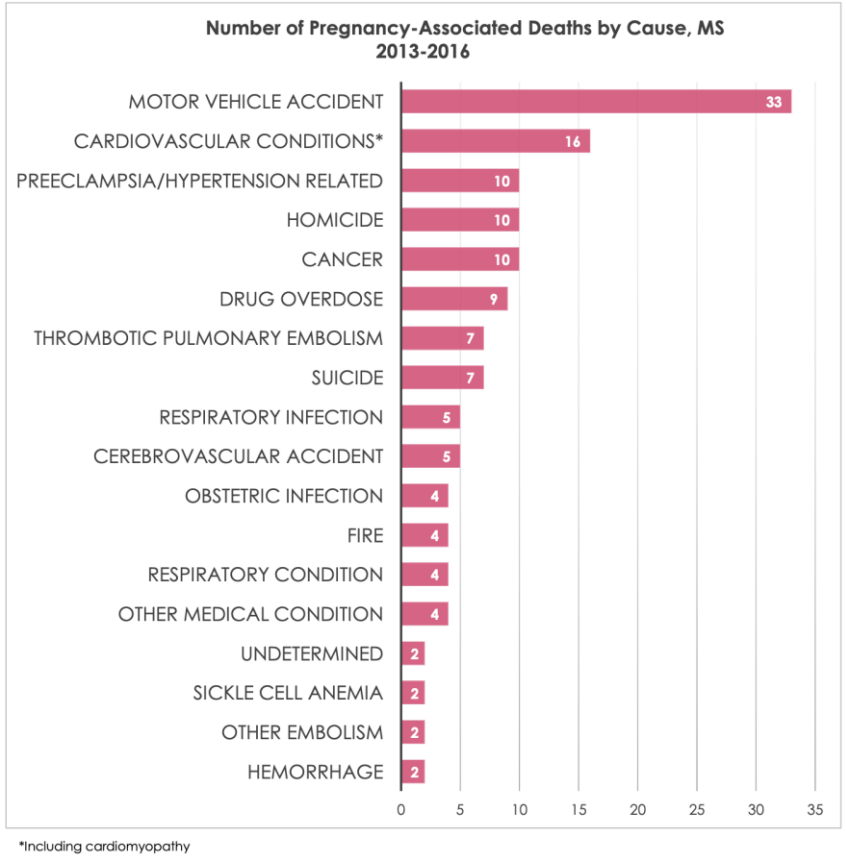
Landscape

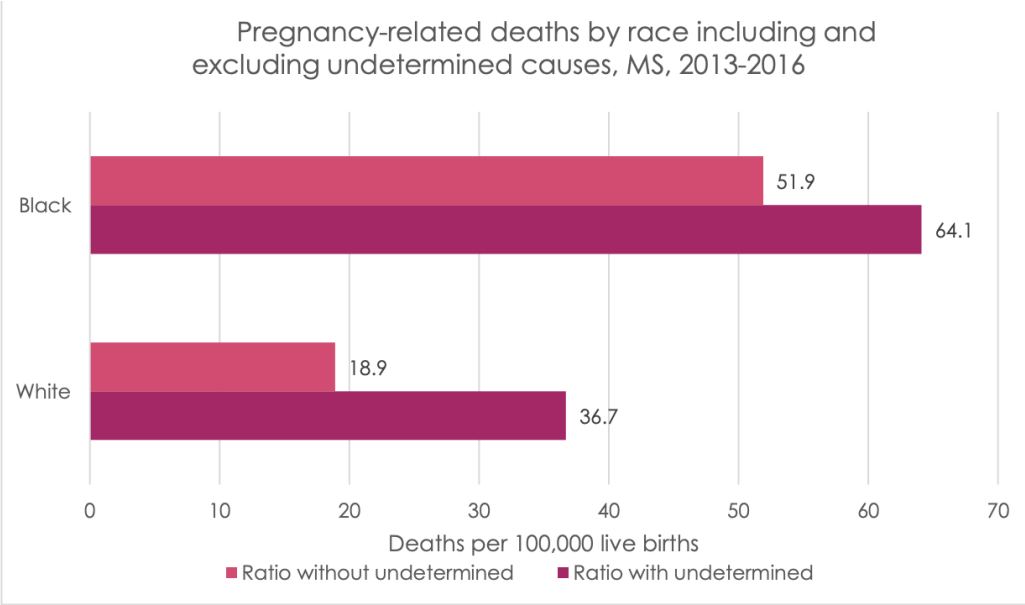
- 42 Birthing Facilities in Mississippi
- ~37,000 births per year
- 65% Medicaid
- 1 Level IV NICU Level/Academic Medical Center
- 10 III NICUs
- No Birthing Centers
- 429 ob/gyns in 36 of 82 counties
- ~10 MFMs

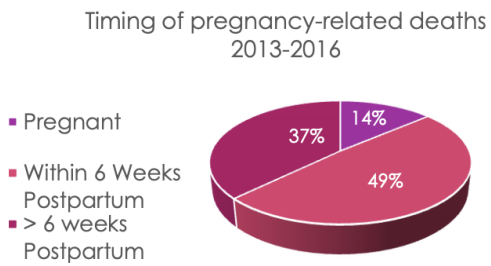


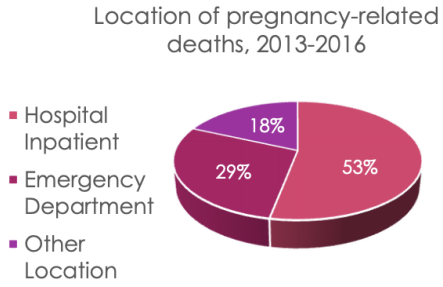
Source: American College of Obstetricians & Gynecologists. (2014)

Maternal Outcomes









Past Initiatives

- Early Elective Deliveries
- Severe Maternal Hypertension 1.0
- Obstetric Hemorrhage Initiative (AIM)
- Neonatal Golden Hour
- Partner- Baby Friendly Hospital Initiative
  (CHAMPS/Boston University)

Current Initiatives

- Maternal
  - Hypertension & Heart
  - Initiative to Support Vaginal Birth (I-Support)
- Neonatal
  - Neonatal Abstinence Syndrome
  - Express Yourself- Human Milk in NICU

Hypertension & Heart Project Aims & Goals

By November of 2021, for mothers with confirmed severe maternal hypertension:

Increase proportion treated for severe HTN in <60 minutes to >80%

Increase proportion receiving preeclampsia education at discharge to >80%

Increase proportion with follow-up appointments within 10 days to >80%

Increase proportion of cases with provider/nurse debriefs to >80%

Reduce hypertension related mortality in Mississippi by 20% by 2021

All facilities conducting at least one annual drill on maternal cardiac arrest annually.

Hypertension & Heart Activities

- Documented hypertension management protocol (JCAHO)
- Provider and nurse education on severe maternal hypertension
- Debriefs
- Multidisciplinary case reviews
- Patient education materials
- Electronic Health Record integration of order sets
- Drills twice per year

Process

- Toolkit development and materials dissemination
- Annual Kick Off
- Monthly Coaching Team Calls
- Quarterly Individual Calls
- AIM Database Entry & Tracking
- Advanced Life Support in Obstetrics Simulation Training (ALSO)
- Celebrations/Recognitions

Progress

	2016	2018	2020
Debriefs	10%	20%	67%
Case Reviews	10%	25%	76%
Patient Support	15%	25%	67%
Written HTN Policy	7%	7%	46%
EHR Integration	7%	7%	56%
Drills (quarterly avg)	<1	<1	1.6

Changing Culture & Convention

WHY AREN'T SEVERE BLOOD PRESSURES TREATED?

- "We have just one doctor who still wants to start with Magnesium"
- "We wait for the epidural to be in place"
- "The main concern is bottoming the mother and baby out"
- " We only call the doctor about 'emergencies"
- " We tolerate higher pressures in postpartum period"
- "If the patient has chronic hypertension, we don't usually treat"
- " Our OB champion is the most junior person in the group"

Cesarean Delivery in Mississippi

MISSISSIPPI

TOTAL C-SECTION RATE

Cesarean Rate (38.2%)

Vaginal Birth Rate (61.8%)

Rank in the United States: Highest

LOW-RISK (NTSV) CESAREAN RATE

NTSV Cesarean Rate (31.8%)

NTSV Vaginal Birth Rate (68.2%)

Rank in the United States: Highest

REPEAT CESAREAN RATE

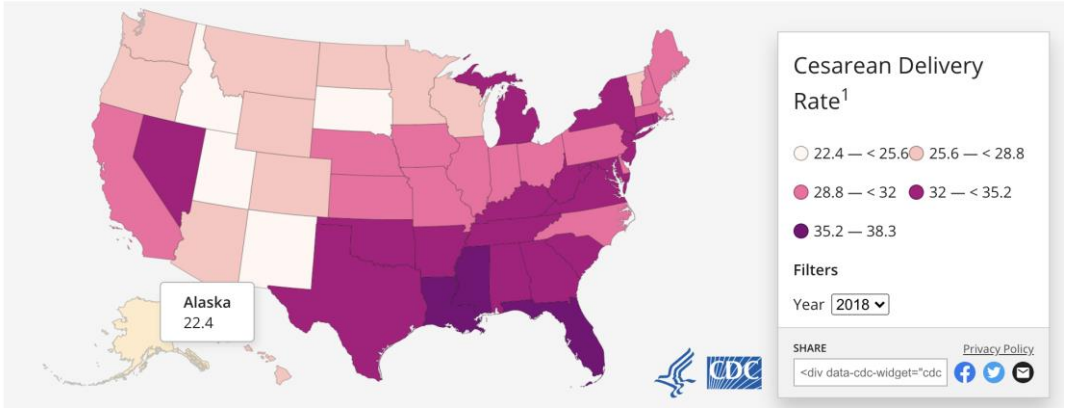
Repeat Cesarean Rate (93.8%)

VBAC Rate (6.2%)

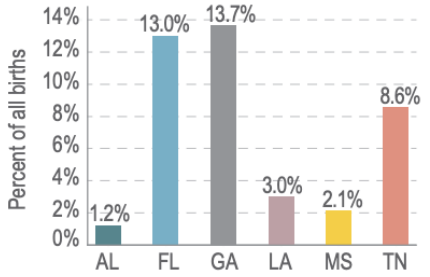
Rank in the United States: Highest

national accreta foundation

Cesarean Delivery Rate by State



PERCENTAGE OF BIRTHS ATTENDED BY MIDWIVES IN SOUTHEASTERN STATES, 2018



Source: CDC. (2019). National Center for Health Statistics. Natality Reports (2016-2018).

Initiative to Support Vaginal Birth (I-Support) Pilot

- Pilot of 5 hospitals to test process & data
- Goal: By 6/2021 reduce of primary cesarean due to failure to progress and failed induction of labor by 10%

Initiative to Support Vaginal Birth (I-Support) Pilot

1

Phase 1:
Education & Training

2

Phase 2:

Data sharing & Case Review

3

Phase 3:

Policy Development

Initiative to Support Vaginal Birth (I-Support)

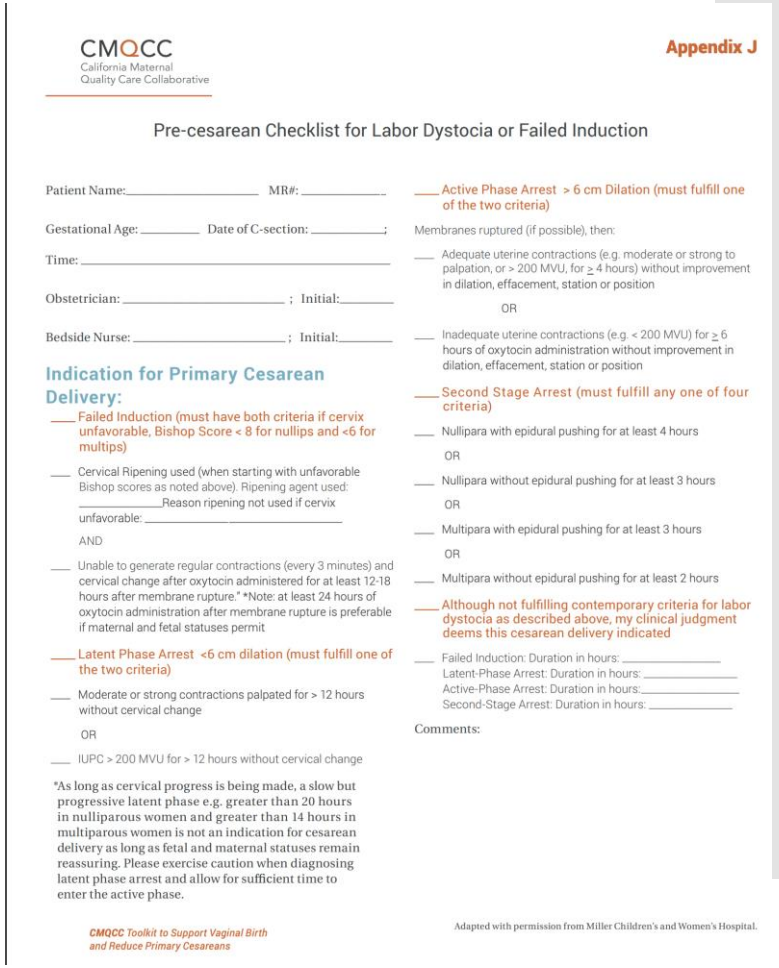
Phase 1- Education/Training

- AIM eModules
- Physiologic Birth Education
- Hands-on /Virtual Training in Labor Support
- ACOG/SMFM Safe Prevention of Primary Cesarean
- Use of bedside checklist/review tool

Promoting Primary Vaginal Deliveries

FPQC

*Pro*moting Primary *Va*ginal *De*liveries (PROVIDE) Initiative



CMQCC
California Maternal Quality Care Collaborative

Appendix J

Pre-cesarean Checklist for Labor Dystocia or Failed Induction

Patient Name:_____ MR#:_____

Gestational Age:_____ Date of C-section:_____;

Time:_____

Obstetrician:_____; Initial:_____

Bedside Nurse:_____; Initial:_____

Indication for Primary Cesarean Delivery:

___ Failed Induction (must have both criteria if cervix unfavorable, Bishop Score < 8 for nullips and <6 for multips)

___ Cervical Ripening used (when starting with unfavorable Bishop scores as noted above). Ripening agent used: _____Reason ripening not used if cervix unfavorable: _____

AND

___ Unable to generate regular contractions (every 3 minutes) and cervical change after oxytocin administered for at least 12-18 hours after membrane rupture.* *Note: at least 24 hours of oxytocin administration after membrane rupture is preferable if maternal and fetal statuses permit

___ Latent Phase Arrest <6 cm dilation (must fulfill one of the two criteria)

___ Moderate or strong contractions palpated for > 12 hours without cervical change

OR

___ IUPC > 200 MVU for > 12 hours without cervical change

*As long as cervical progress is being made, a slow but progressive latent phase e.g. greater than 20 hours in nulliparous women and greater than 14 hours in multiparous women is not an indication for cesarean delivery as long as fetal and maternal statuses remain reassuring. Please exercise caution when diagnosing latent phase arrest and allow for sufficient time to enter the active phase.

___ Active Phase Arrest > 6 cm Dilation (must fulfill one of the two criteria)

Membranes ruptured (if possible), then:

___ Adequate uterine contractions (e.g. moderate or strong to palpation, or > 200 MVU, for ≥ 4 hours) without improvement in dilation, effacement, station or position

OR

___ Inadequate uterine contractions (e.g. < 200 MVU) for ≥ 6 hours of oxytocin administration without improvement in dilation, effacement, station or position

___ Second Stage Arrest (must fulfill any one of four criteria)

___ Nullipara with epidural pushing for at least 4 hours

OR

___ Nullipara without epidural pushing for at least 3 hours

OR

___ Multipara with epidural pushing for at least 3 hours

OR

___ Multipara without epidural pushing for at least 2 hours

___ Although not fulfilling contemporary criteria for labor dystocia as described above, my clinical judgment deems this cesarean delivery indicated

___ Failed Induction: Duration in hours: _____
Latent-Phase Arrest: Duration in hours: _____
Active-Phase Arrest: Duration in hours: _____
Second-Stage Arrest: Duration in hours: _____

Comments:

CMQCC Toolkit to Support Vaginal Birth and Reduce Primary Cesareans

Adapted with permission from Miller Children's and Women's Hospital.

Initiative to Support Vaginal Birth (I-Support)

Phase 2- Data Sharing & Case Reviews

- Monthly sharing of unblinded or blinded NTSV with providers, aggregate with OB Unit
- Proportion of primary cesareans performed for failure to progress or failed induction of labor that do not meet ACOG/SMFM Criteria

	Criteria to meet ACOG/SMFM Indication
Dystocia/Failure to Progress	• Cervix 6cm or greater at time of CS • Membranes ruptured and NO cervical change x 4 hours with adequate contractions (or 6hrs w/ oxytocin)
Failed Induction	• Bishop score at or above 6cm before elective induction • Oxytocin used for a minimum of 12 hrs after membrane rupture

- Monthly team case presentation
  - A case that met criteria
  - A case that did not meet criteria

Details from Case Presentations Highlight Challenges

- Lack of in-house OB coverage drives 5pm cesareans
- Lack of in-house Anesthesiology coverage slows overnight inductions
- Small practices and solo providers balancing long labors and work schedules
- Variable use of induction strategies: foley balloons, combined balloons with medications, IUPCs
- Variable maternal support: Doulas, solid food, ambulation, showers

Initiative to Support Vaginal Birth (I-Support)

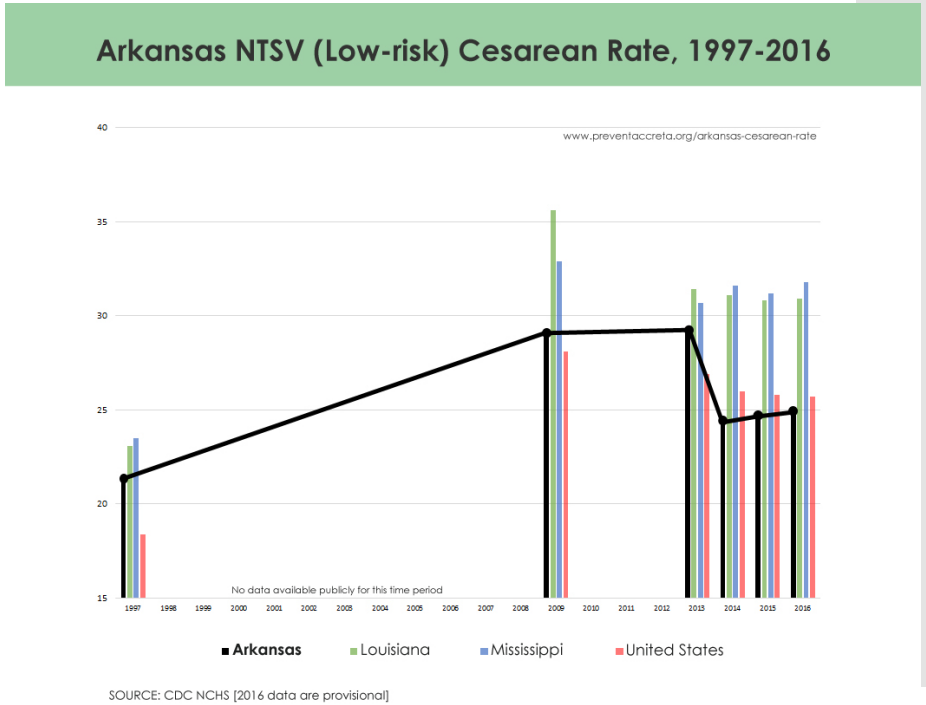
Phase 3- Policy Development

State Level

- State/Payer level incentives
- Staffing shortages

Hospital Level

- In-house coverage
- Standardized education
- Standardized data sharing
- Maternal support policies



Next Steps

- Monthly data reporting to MSPQC
- Enrolling 5 additional teams, keeping small cohorts
- Patient/Family input- Local Cesarean Awareness Network
- Statewide kick-off November 2021

Thank You

If you want to go fast, go alone;

if you want to go far, go together.

--Kenyan Proverb

- Charlene.Collier@msdh.ms.gov